

**AMENDMENTS TO THE CLAIMS**

The following listing of claims will replace all prior versions and listings of claims in the application.

**LISTING OF CLAIMS**

1. (Canceled)
2. (Currently Amended) A method of controlling call admission in a communications network, comprising:  
  
calculating an initial load level as a function of at least one of a difference between a current measured power and a previous measured power and a difference between a current number of users and a previous number of users; and  
  
controlling call admission based on the calculated load level, wherein said calculating step recursively calculates updated load levels.
3. (Currently Amended) A method of controlling call admission in a communications network, comprising:  
  
calculating an initial load level as a function of at least one of a difference between measured powers over time and a difference between a number of users over time; and  
  
controlling call admission based on the calculated load level, wherein said calculating step estimates the initial load level as a function of a measured difference between powers over time and a difference between the number of users over time.
4. (Currently Amended) The method of claim 3, wherein said calculating step estimates the initial load level,  $L_{new}$ , by solving:

$$L_{new}(N_{new}, P_{new}) = \frac{N_{new} \times (P_{new} - P_{old})}{N_{new} \times (P_{new} - P_{old}) + P_{old} \times (N_{new} - N_{old})},$$

where  $N_{new}$  and  $N_{old}$  are current and previous number of users values respectively, and  $P_{new}$  and  $P_{old}$  are current and previous power measurements respectively.

5. (Currently Amended) A method of controlling call admission in a communications network, comprising:

calculating an initial load level as a function of at least one of previous and current measured powers ~~or~~ and previous and current number of users; and

controlling call admission based on the calculated load level,

wherein said calculating step recursively updates the calculated load level as a function of previous and current number of users.

6. (Currently Amended) A method of controlling call admission in a communications network, comprising:

calculating an initial load level as a function of at least one of measured powers ~~or~~ and previous and current number of users; and

controlling call admission based on the calculated load level,

wherein said calculating step recursively updates the calculated load level as a function of previous and current measured powers.

7. (Currently Amended) The method of claim 5, wherein said calculating step ~~estimates~~ recursively updates the calculated load level,  $L_{new}$ , by solving:

$$L_{new} = L_{old} \times \frac{N_{new}}{N_{old}},$$

where  $L_{old}$  is a previously calculated load level, and  $N_{new}$  and  $N_{old}$  are current and previous number of users values respectively.

8. (Currently Amended) The method of claim 6, wherein said calculating step estimates recursively updates the calculated load level,  $L_{new}$ , by solving:

$$L_{new} = 1 - \frac{P_{old}}{P_{new}} \times (1 - L_{old}),$$

where  $L_{old}$  is a previously calculated load level, and  $P_{new}$  and  $P_{old}$  are current and previous power measurements respectively.

9. (Currently Amended) The method of claim 6, further comprising:  
verifying a the calculated load level before using the calculated load level in said controlling step.

10. (Original) The method of claim 9, wherein said verifying step calculates an estimated power measurement,  $P_{new'}$ , based on the calculated load level,  $L_{new}$ , by solving:

$$P_{new'} = \frac{P_{old}(1 - L_{old})}{(1 - L_{new})},$$

where  $P_{old}$  is a previous power measurement and  $L_{old}$  is a previously calculated load level, said verifying step comparing  $P_{new'}$  with an actual power measurement,  $P_{new}$ , to determine whether  $L_{new}$  is reasonably accurate.

11. (Currently Amended) The method of claim 10, wherein, when said verifying step indicates that the  $P_{new'}$  is not sufficiently close to  $P_{new}$ , said calculating step ~~calculates~~ recursively updates the calculated load level,  $L_{new}$  by solving:

$$L_{new} = 1 - \frac{P_{old}}{P_{new}} \times (1 - L_{old}) .$$

12. (Canceled)

13. (Currently Amended) A system of controlling call admissions in a communications network, comprising:

load calculating means for calculating an initial load level as a function of at least one of previous and current measured powers or and previous and current number of users; and

control means for controlling call admission based on the calculated load level,

wherein said load calculating means recursively ~~calculates updated~~ updates the calculated load levels.

14. (Currently Amended) A system of controlling call admissions in a communications network, comprising:

load calculating means for calculating an initial load level as a function of at least one of a difference between measured powers over time and a difference between a number of users over time; and

control means for controlling call admission based on the calculated load level;

~~wherein said load calculating means estimates load level as a function of a difference between measured powers over time and a difference between the number of users over time.~~

15. (Currently Amended) The system of claim 14, wherein said load calculating means estimates the initial load level,  $L_{new}$ , by solving:

$$L_{new}(N_{new}, P_{new}) = \frac{N_{new} \times (P_{new} - P_{old})}{N_{new} \times (P_{new} - P_{old}) + P_{old} \times (N_{new} - N_{old})} ,$$

where  $N_{new}$  and  $N_{old}$  are the current and previous number of users values respectively, and  $P_{new}$  and  $P_{old}$  are the current and previous power measurements respectively.

16. (Currently Amended) A system of controlling call admissions in a communications network, comprising:

load calculating means for calculating an initial load level as a function of at least one of previous and current measured powers ~~or~~ and previous and current number of users; and

control means for controlling call admission based on the calculated load level,

wherein said load calculating means recursively updates the calculated load level as a function of previous and current number of users.

17. (Currently Amended) A system of controlling call admissions in a communications network, comprising:

load calculating means for calculating a initial load level as a function of previous and current measured powers ~~or~~ and previous and current number of users; and

control means for controlling call admission based on the calculated load level,

wherein said load calculating means recursively updates the calculated load level as a function of previous and current measured powers.

18. (Currently Amended) The system of claim 16, wherein said load calculating means ~~estimates~~ recursively updates the calculated load level,  $L_{new}$ , by solving:

$$L_{new} = L_{old} \times \frac{N_{new}}{N_{old}},$$

where  $L_{old}$  is a previously calculated load level, and  $N_{new}$  and  $N_{old}$  are current and previous number of users values respectively.

19. (Currently Amended) The system of claim 17, wherein said load calculating means ~~estimates~~ recursively updates the calculated load level,  $L_{new}$ , by solving:

$$L_{new} = 1 - \frac{P_{old}}{P_{new}} \times (1 - L_{old}) ,$$

where  $L_{old}$  is a previously calculated load level, and  $P_{new}$  and  $P_{old}$  are current and previous received power measurements respectively.

20. (Currently Amended) The system of claim 17, further comprising:  
verifying means for verifying a the calculated load level before said control means uses the calculated load level.

21. (Original) The system of claim 20, wherein said verifying means calculates an estimated power measurement,  $P_{new'}$ , based on the calculated load level,  $L_{new}$ , by solving:

$$P_{new'} = \frac{P_{old}(1 - L_{old})}{(1 - L_{new})} ,$$

where  $P_{old}$  is a previous power measurement and  $L_{old}$  is a previously calculated load level, said verifying means comparing  $P_{new'}$  with an actual power measurement  $P_{new}$  to determine whether  $L_{new}$  is reasonably accurate.

22. (Currently Amended) The system of claim 21, wherein, when said verifying means indicates that the  $P_{new'}$  is not sufficiently close to  $P_{new}$ , said calculating means ~~calculates~~ recursively updates the calculated load level  $L_{new}$  by solving:

$$L_{new} = 1 - \frac{P_{old}}{P_{new}} \times (1 - L_{old}) .$$

23. (Previously Presented) the system of claim 13, further comprising:

input means for receiving power measurements and number of user values.

24. (Canceled)

25. (Canceled)

26. (Canceled)

27. (Canceled)

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